

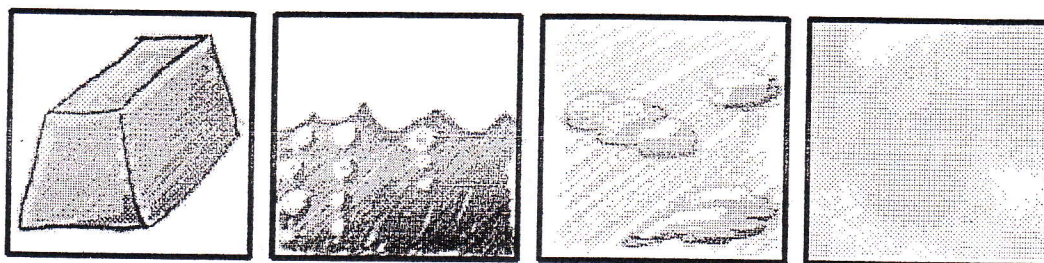


STATES

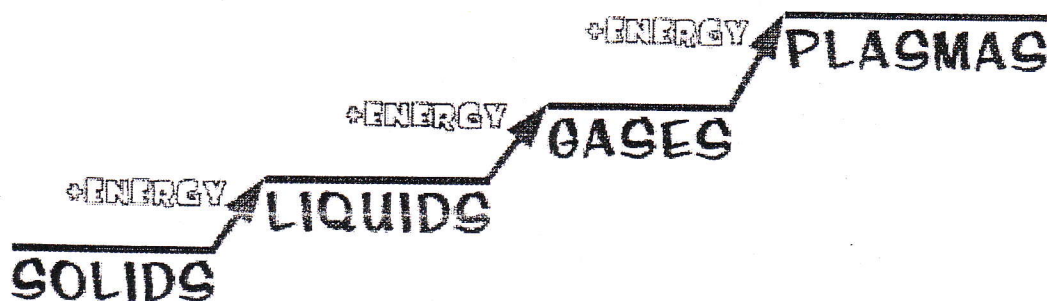
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STATES OF MATTER

There are four main **STATES** of matter. **SOLIDS**, **LIQUIDS**, **GASES**, and **PLASMAS**. Each of these states is also known as a **PHASE**. **ELEMENTS** and compounds can move from one phase to another phase when special physical forces are present (* *physical, not chemical* *). One example of those forces is **TEMPERATURE**. When temperature changes, the phase can change. Generally as the temperature rises, matter moves to a more active state.



Phase describes a **PHYSICAL** state of matter. The key word to notice is physical, because things only move from one phase to another by physical means. If energy is added, like increasing the temperature or increasing pressure, or if energy is taken away, like freezing something, or decreasing pressure, those are physical changes. Those kinds of forces change states of matter.



One compound or element can move from phase to phase, but still be the same substance. You can see water vapor over a boiling pot of water. That vapor (or gas) can condense and become a drop of water. If you put that drop in the freezer, it would become a solid. No matter what phase it was in, it was always water and it always had the same chemical properties. A